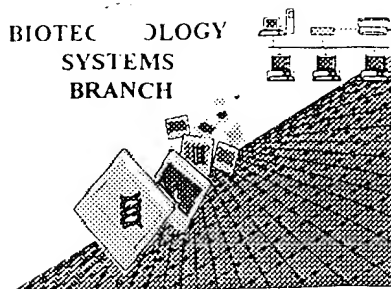


RAW SEQUENCE LISTING ERROR REPORT

BIOTECHNOLOGY
SYSTEMS
BRANCH



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/613,591A
Source: 1647
Date Processed by STIC: 3-9-01

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is 32K-compliant. Checker allows public users to check sequence listings in Computer Readable Form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

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MAR 22 2001
SEARCH CENTER 308-4212

1647

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/613,591A DATE: 03/09/2001
 TIME: 11:17:20

Input Set : A:\A-378CIP5 (US).txt
 Output Set: N:\CRF3\03092001\I613591A.raw

**Does Not Comply
 Corrected Diskette Needed**

3 <110> APPLICANT: BOYLE, WILLIAM
 4 LACEY, DAVID
 5 CALZONE, FRANK
 6 CHANG, MING-SHI
 7 SENALDI, GIORGIO
 9 <120> TITLE OF INVENTION: COMBINATION THERAPY FOR CONDITIONS LEADING TO BONE LOSS
 11 <130> FILE REFERENCE: A-378CIP5
 13 <140> CURRENT APPLICATION NUMBER: US 09/613,591A
 14 <141> CURRENT FILING DATE: 2000-07-10
 16 <150> PRIOR APPLICATION NUMBER: US 09/457,647
 17 <151> PRIOR FILING DATE: 1999-12-09
 19 <150> PRIOR APPLICATION NUMBER: US 09/350,670
 20 <151> PRIOR FILING DATE: 1999-07-09
 22 <150> PRIOR APPLICATION NUMBER: US 08/706,945
 23 <151> PRIOR FILING DATE: 1996-09-03
 25 <150> PRIOR APPLICATION NUMBER: US 08/577,788
 26 <151> PRIOR FILING DATE: 1995-12-22
 28 <160> NUMBER OF SEQ ID NOS: 168
 30 <170> SOFTWARE: PatentIn version 3.0
 32 <210> SEQ ID NO: 1
 33 <211> LENGTH: 36
 34 <212> TYPE: DNA
 35 <213> ORGANISM: Artificial Sequence
 37 <220> FEATURE:
 38 <221> NAME/KEY: misc_feature
 39 <222> LOCATION: (16)..(23)
 40 <223> OTHER INFORMATION: NotI restriction site
 43 <220> FEATURE:
 44 <221> NAME/KEY: misc_feature
 45 <222> LOCATION: (28)..(35)
 46 <223> OTHER INFORMATION: N = random nucleic acid
 49 <400> SEQUENCE: 1
 W--> 50 aaaggaagga aaaaagcggc cgctacannnn nnnnnnt 36
 53 <210> SEQ ID NO: 2
 54 <211> LENGTH: 16
 55 <212> TYPE: DNA
 56 <213> ORGANISM: Artificial Sequence
 58 <220> FEATURE:
 59 <221> NAME/KEY: misc_feature
 60 <223> OTHER INFORMATION: ds oligonucleotide adapter
 63 <400> SEQUENCE: 2
 64 tcgacccacg cgtccg 16
 67 <210> SEQ ID NO: 3
 68 <211> LENGTH: 12
 69 <212> TYPE: DNA
 70 <213> ORGANISM: Artificial Sequence
 72 <220> FEATURE:

*Missing mandatory <220>, <223>
 features to explain the source
 of the artificial sequence.*

RAW SEQUENCE LISTING DATE: 03/09/2001
 PATENT APPLICATION: US/09/613,591A TIME: 11:17:20

Input Set : A:\A-378CIP5 (US).txt
 Output Set: N:\CRF3\03092001\I613591A.raw

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73 <221> NAME/KEY: misc_feature
74 <223> OTHER INFORMATION: ds oligonucleotide adapter
77 <400> SEQUENCE: 3
78 ggggtgcgcag gc                                     12
81 <210> SEQ ID NO: 4
82 <211> LENGTH: 18
83 <212> TYPE: DNA
84 <213> ORGANISM: Artificial Sequence
86 <220> FEATURE:
87 <221> NAME/KEY: misc_feature
88 <223> OTHER INFORMATION: PCR primer
91 <400> SEQUENCE: 4
92 tgtaaaacga cggccagt                               18
95 <210> SEQ ID NO: 5
96 <211> LENGTH: 18
97 <212> TYPE: DNA
98 <213> ORGANISM: Artificial Sequence
100 <220> FEATURE:
101 <221> NAME/KEY: misc_feature
102 <223> OTHER INFORMATION: PCR primer
105 <400> SEQUENCE: 5
106 caggaaacag ctatgacc                               18
109 <210> SEQ ID NO: 6
110 <211> LENGTH: 20
111 <212> TYPE: DNA
112 <213> ORGANISM: Artificial Sequence
114 <220> FEATURE:
115 <221> NAME/KEY: misc_feature
116 <223> OTHER INFORMATION: T3 primer
119 <400> SEQUENCE: 6
120 caattaaccc tcactaaagg                             20
123 <210> SEQ ID NO: 7
124 <211> LENGTH: 23
125 <212> TYPE: DNA
126 <213> ORGANISM: Rattus rattus
128 <400> SEQUENCE: 7
129 gcattatgac ccagaaaccg gac                         23
132 <210> SEQ ID NO: 8
133 <211> LENGTH: 23
134 <212> TYPE: DNA
135 <213> ORGANISM: Rattus rattus
137 <400> SEQUENCE: 8
138 aggtagcgcc ctctctcaca ttc                         23
141 <210> SEQ ID NO: 9
142 <211> LENGTH: 30
143 <212> TYPE: DNA
144 <213> ORGANISM: Artificial Sequence
146 <220> FEATURE:
147 <221> NAME/KEY: misc_feature

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RAW SEQUENCE LISTING

DATE: 03/09/2001

PATENT APPLICATION: US/09/613,591A

TIME: 11:17:21

Input Set : A:\A-378CIP5 (US).txt

Output Set: N:\CRF3\03092001\I613591A.raw

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148 <223> OTHER INFORMATION: PCR primer
151 <400> SEQUENCE: 9
152 gactagtccc acaatgaaca agtggctgtg 30
155 <210> SEQ ID NO: 10
156 <211> LENGTH: 45
157 <212> TYPE: DNA
158 <213> ORGANISM: Artificial Sequence
160 <220> FEATURE:
161 <221> NAME/KEY: misc_feature
162 <223> OTHER INFORMATION: PCR primer
165 <400> SEQUENCE: 10
166 ataagaatgc ggccgctaaa ctatgaaaca gcccgatgac cattc 45
169 <210> SEQ ID NO: 11
170 <211> LENGTH: 21
171 <212> TYPE: DNA
172 <213> ORGANISM: Artificial Sequence
174 <220> FEATURE:
175 <221> NAME/KEY: misc_feature
176 <223> OTHER INFORMATION: PCR primer
179 <400> SEQUENCE: 11
180 gcctctagaa agagctggga c 21
183 <210> SEQ ID NO: 12
184 <211> LENGTH: 21
185 <212> TYPE: DNA
186 <213> ORGANISM: Artificial Sequence
188 <220> FEATURE:
189 <221> NAME/KEY: misc_feature
190 <223> OTHER INFORMATION: PCR primer
193 <400> SEQUENCE: 12
194 cgccgtgttc catttatgag c 21
197 <210> SEQ ID NO: 13
198 <211> LENGTH: 24
199 <212> TYPE: DNA
200 <213> ORGANISM: Rattus rattus
202 <400> SEQUENCE: 13
203 atcaaaggca gggcatactt cctg 24
206 <210> SEQ ID NO: 14
207 <211> LENGTH: 24
208 <212> TYPE: DNA
209 <213> ORGANISM: Rattus rattus
211 <400> SEQUENCE: 14
212 gttgcactcc tgtttcacgg tctg 24
215 <210> SEQ ID NO: 15
216 <211> LENGTH: 24
217 <212> TYPE: DNA
218 <213> ORGANISM: Rattus rattus
220 <400> SEQUENCE: 15
221 caagacacct tgaaggcct gatg 24
224 <210> SEQ ID NO: 16

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RAW SEQUENCE LISTING

DATE: 03/09/2001

PATENT APPLICATION: US/09/613,591A

TIME: 11:17:21

Input Set : A:\A-378CIP5 (US).txt

Output Set: N:\CRF3\03092001\I613591A.raw

```

225 <211> LENGTH: 24
226 <212> TYPE: DNA
227 <213> ORGANISM: Rattus rattus
229 <400> SEQUENCE: 16
230 taacttttac agaagagcat cagc 24
233 <210> SEQ ID NO: 17
234 <211> LENGTH: 33
235 <212> TYPE: DNA
236 <213> ORGANISM: Rattus rattus
238 <400> SEQUENCE: 17
239 agcgcgggccg catgaacaag tggctgtgct gcg 33
242 <210> SEQ ID NO: 18
243 <211> LENGTH: 31
244 <212> TYPE: DNA
245 <213> ORGANISM: Rattus rattus
247 <400> SEQUENCE: 18
248 agctctagag aaacagccca gtgaccattc c 31
251 <210> SEQ ID NO: 19
252 <211> LENGTH: 24
253 <212> TYPE: DNA
254 <213> ORGANISM: Rattus rattus
256 <400> SEQUENCE: 19
257 gtgaagctgt gcaagaacct gatg 24
260 <210> SEQ ID NO: 20
261 <211> LENGTH: 24
262 <212> TYPE: DNA
263 <213> ORGANISM: Rattus rattus
265 <400> SEQUENCE: 20
266 atcaaaggca gggcatactt cctg 24
269 <210> SEQ ID NO: 21
270 <211> LENGTH: 24
271 <212> TYPE: DNA
272 <213> ORGANISM: Homo sapiens
274 <400> SEQUENCE: 21
275 cagatcctga agctgctcag ttg 24
278 <210> SEQ ID NO: 22
279 <211> LENGTH: 33
280 <212> TYPE: DNA
281 <213> ORGANISM: Homo sapiens
283 <400> SEQUENCE: 22
284 agcgcgggccg cggggaccac aatgaacaag ttg 33
287 <210> SEQ ID NO: 23
288 <211> LENGTH: 33
289 <212> TYPE: DNA
290 <213> ORGANISM: Homo sapiens
292 <400> SEQUENCE: 23
293 agctctagaa ttgtgaggaa acagctcaat ggc 33
296 <210> SEQ ID NO: 24
297 <211> LENGTH: 39

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RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/613,591A
 DATE: 03/09/2001
 TIME: 11:17:21

Input Set : A:\A-378CIP5 (US).txt
 Output Set: N:\CRF3\03092001\I613591A.raw

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298 <212> TYPE: DNA
299 <213> ORGANISM: Artificial Sequence
301 <220> FEATURE:
302 <221> NAME/KEY: misc_feature
303 <223> OTHER INFORMATION: PCR primer
306 <400> SEQUENCE: 24
307 atagcggccg ctgagcccaa atcttgtgac aaaactcac 39
310 <210> SEQ ID NO: 25
311 <211> LENGTH: 45
312 <212> TYPE: DNA
313 <213> ORGANISM: Artificial Sequence
315 <220> FEATURE:
316 <221> NAME/KEY: misc_feature
317 <223> OTHER INFORMATION: PCR primer
320 <400> SEQUENCE: 25
321 tctagagtcg acttatcatt taaccggaga caggagagagg ctctt 45
324 <210> SEQ ID NO: 26
325 <211> LENGTH: 38
326 <212> TYPE: DNA
327 <213> ORGANISM: Mus musculus
329 <400> SEQUENCE: 26
330 cctctgagct caagcttccg aggaccacaa tgaacaag 38
333 <210> SEQ ID NO: 27
334 <211> LENGTH: 43
335 <212> TYPE: DNA
336 <213> ORGANISM: Mus musculus
338 <400> SEQUENCE: 27
339 cctctgcggc cgctaagcag cttattttca cggattgaac ctg 43
342 <210> SEQ ID NO: 28
343 <211> LENGTH: 38
344 <212> TYPE: DNA
345 <213> ORGANISM: Mus musculus
347 <400> SEQUENCE: 28
348 cctctgagct caagcttccg aggaccacaa tgaacaag 38
351 <210> SEQ ID NO: 29
352 <211> LENGTH: 24
353 <212> TYPE: DNA
354 <213> ORGANISM: Homo sapiens
356 <400> SEQUENCE: 29
357 tccgtaagaa acagcccagt gacc 24
360 <210> SEQ ID NO: 30
361 <211> LENGTH: 31
362 <212> TYPE: DNA
363 <213> ORGANISM: Mus musculus
365 <400> SEQUENCE: 30
366 cctctgcggc cgctgttgca tttcctttct g 31
369 <210> SEQ ID NO: 31
370 <211> LENGTH: 19
371 <212> TYPE: PRT

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VERIFICATION SUMMARY

DATE: 03/09/2001

PATENT APPLICATION: US/09/613,591A

TIME: 11:17:22

Input Set : A:\A-378CIP5 (US).txt

Output Set: N:\CRF3\03092001\I613591A.raw

L:50 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1